Division of Health Care Finance and Policy

Fiscal Year 1995

Inpatient Hospital Discharge Database Documentation Manual

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Version 95.V01

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NOTE RE: INITIAL RELEASE

This initial release of the database, version 95.V01, may be subject to change. An addition update version may become available which will incorporate additional information received by the Commission.

This database documentation consists of two parts. The Technical Documentation is printed on blue paper. The General Documentation follows the Technical Documentation.

Table of Contents

GENERAL DOCUMENTATION

FISCAL YEAR 1995 MERGED CASE MIX & CHARGE DATA

Version 95.V01

Documentation Overview

The General Documentation for the fiscal year 1995 merged case mix and charge data is intended to provide database users with an understanding of the data quality issues connected with the data elements they may decide to examine. This document includes hospital-reported discrepancies received in response to the data verification report process.

The Massachusetts Rate Setting Commission (MRSC) welcomes your comments and suggestions for improvement to this database. Please provide Judy Parlato with your written comments and/or recommendations.

The General Documentation consists of five parts.

Part 1 – BACKGROUND INFORMATION: provides information on the development of the fiscal year 1995 database and the DRG methodology used. Six levels of the database exist; the information contained in each of the database levels is described in this section.

Part 2 – DATA: describes the basic data quality standards as contained in 114.1 CMR 17.00 Requirement for the Submission of Case Mix and Charge Data (referred to as the 17.00 Regulation); some general data definitions, general data caveats, and information on specific data elements.

The case mix data plays a vital and growing role in health care research and analysis. To ensure the database is as accurate as possible, the MRSC requires hospitals to use a standard Response Sheet to certify the correctness of their data as it appears on the verification report, or to certify that the hospital found discrepancies in the data. If a hospital finds data discrepancies, then the MRSC requests the hospital submit written corrections that provide an accurate profile of the hospital's fiscal year 1995 discharges. These responses are contained in Part 3.

Part 3 - HOSPITAL RESPONSES: details hospitals' responses received as a result of the data verification process. From this section users can also learn which hospitals did not verify their data. This section contains the following lists and charts.

1. Summary of Hospitals' Verification Report Responses
2. Summary of Reported Discrepancies by Category of Reported Data Errors.
3. Data Discrepancies and Correction Responses Received from Hospitals
4. Hospitals with Special Circumstances

Part 4 – CAUTIONARY USE DATA FILE: lists hospitals which either have submitted fewer than four quarters of data which passed the MRSC's technical edit routines, or have submitted fewer than four quarters of data.

> **NOTE**: In Fiscal year 1995, four hospitals did not meet the requirement of the 17.00 Regulation for all four quarters.

Part 4a – HOSPITALS WITH NO DATA SUBMISSION: lists those hospitals which failed to provide any fiscal year 1995 data to the MRSC.

Part 5 – ATTACHMENTS: Provides Attachments I through IV listed in the Table of Contents.

PART 1 – BACKGROUND INFORMATION

1. Development of the 1995 Database
2. DRG Methodology

Part 1 – Background Information

1. Development of the 1995 Database

The Massachusetts Rate Setting Commission continued its efforts to improve the processing and accuracy of case mix data. All staff involved with the processing and management of the database meet on a weekly basis to discuss and, in most cases, resolve a host of issues that inevitably arise. Additional staff was added to the project in order that the MRSC could respond to hospitals with needed technical assistance and to ensure that the processing of the data was done expeditiously. The MRSC also continued the practice of providing hospitals with an opportunity to verify data at mid-year.

Six Fiscal Year 1995 database levels have been created to correspond to the levels set forth in proposed Regulation 114.5 CMR 2.00. Higher levels contain an increasing number of the data elements which are defined as "Deniable Data Elements" in Regulation 114.5 CMR 2.00. The deniable data elements are medical record number, billing number, claim certificate number (Medicaid Recipient Identification Number), unique health identification number (UHIN), date of admission, date of discharge, date of birth, date(s) of surgery, and unique physician number (UPN). A description of these levels follows:

LEVEL I	Contains all case mix data elements, except the deniable data elements.
LEVEL II	Contains all Level I data elements, plus the UPN.
LEVEL III	Contains all Level I data elements, plus the UHIN, an admission sequence number for each UHIN record, and a calculation of the number of days between inpatient stays for each UHIN record.
LEVEL IV	Contains all Level I data elements, plus the UPN, the UHIN, an admission sequence number for each UHIN record, and a calculation of the number of days between inpatient stays for each UHIN record.
LEVEL V	Contains all Level IV data elements, plus the date of admission, date of discharge, and the date(s) of surgery.
LEVEL VI	Contains all of the case mix data including deniable data elements except the patient identifier component of the claim certificate number.

2. DRG METHODOLOGY – All-Patient Groupers, Version 8.1 & Version 12.0

RESEARCHERS PLEASE NOTE: The New Jersey Version II Grouper was used to classify discharges into Diagnostic Related Groups (DRGs) prior to October 1991.

Beginning in October 1991, the MRSC began using the All-Patient Grouper Version 8.1 (mainframe) to classify all patient discharges for hospital's profiles of discharges and for the yearly database. This change in grouping methodology was made because the All-Patient DRG better represents the general population and provides improvements in areas such as newborns and the HIV population. This year both the AP-DRG Version 8.1 Grouper and the AP-DRG Version 12.0 grouper have been included on the fiscal year 1995 data base. The purpose of Providing two groupers on this year's data base is to offer a more current grouper, (AP-DRG 12.0) while allowing consistency for previously released data bases which contain the AP-V8.1. (Please note that hospitals reviewed for verification using the AP-V8.1 grouper only.)

The Version 8.1 All Patient-DRG methodology is not totally congruent with the ICD-9-CM procedure and diagnosis codes in effect for this fiscal year 1995. Therefore, it was necessary to convert some ICD-9-CM codes to those acceptable to the AP-DRG 8.1 grouper. The MRSC mapped the applicable ICD-9-CM codes into a clinically representative code using the historical mapper utility provided by 3M Health Information Systems. This conversion is done internally for the purpose of DRG assignment and for reimbursement, and in no way alters the original ICD-9-CM codes that appear on the database. These codes remain on the database as they were reported by the hospital.

Effective January 1, 1994, hospitals were required to report birth weight. To maintain consistency with past year's data grouped with AP-DRG 8.1, the DRG Groupers AP-DRG 8.1 and AP-DRG 12.0 remain set to Option 5, which determines the newborn DRG by inferring the birth weight from the ICD-9-CM code.

DRGs and the Verification Report Process

The hospitals' profile of discharges, grouped by AP-DRG 8.1, is part of the verification report, and it is this grouped profile on which the hospitals commented. The Commission urged hospitals to use the All-Patient-DRG Grouper with same system specifications as used by the MRSC.

PART 2 - DATA

1. Data Quality Standards
2. General Definitions
3. General Data Caveats
4. Specific Data Elements

1. Data Quality Standards

Fiscal year 1995 merged case mix and charge data was submitted 75 days after the close of each quarter. The data was then edited using the Integrated Data Demonstration (IDD) software, as modified by MRSC. Required data elements and corresponding edits are specified in 114.1 CMR 17.00: Requirement for the Submission of Hospital Case Mix and Charge Data.

The quarterly data is edited for compliance with regulatory requirements using a one percent error rate specified in Regulation 114.1 CMR 17.00. The one percent error rate is based on the presence of Type A and Type B errors as follows:

- Type A: One error per discharge caused rejection of the discharge.
- Type B: Two errors per discharge caused rejection of the discharge.

If more than one percent of the discharges are rejected, then the entire tape submission is rejected by the MRSC. These edits primarily check for valid codes, correct formatting, and presence of required data elements. Please see Attachment I for a listing of data elements categorized by error type.

Each hospital receives a quarterly error report displaying invalid discharge information. Quarterly data which does not meet the one percent compliance standard must be resubmitted by the individual hospital until the standard is met. All but four hospitals met this one percent error rate standard for all four quarters of fiscal year 1995. (Data for these four hospitals which did not meet the one percent error rate is contained in the Cautionary Use File.)

Verification Report Process

The yearly case mix and charge data Verification Project is intended to present hospitals with a profile of their individual data as retained by the Commission. The purpose of this project is to function as a quality control measure for hospitals to review the data they have provided to the MRSC. The Verification Report itself is a series of frequency reports covering selected data elements including the number of discharges, amount of charges by accommodation and ancillary center, and listing of Diagnostic Related Groups (DRGs). Please refer to Attachment II for a description of the Verification Report contents.

Hospitals have the opportunity to review their data twice a year. After a hospital has successfully submitted the first two quarters of data, a mid-year verification report is produced for the hospital's review. Hospitals are strongly encouraged to review the mid-year report for inaccuracies and make corrections so that subsequent quarters of data will be accurate. A year-end verification report is produced after four quarters of data have passed the required edits. At this point, hospitals are asked to certify the accuracy of their data. If any discrepancies exist, the hospital is requested to provide a written explanation of the discrepancies to be included in the General Documentation which accompanies copies of the database released to users. These written explanations are contained in Part 3 of the documentation.

2. General Data Definitions

Before turning to an examination of specific data elements, several basic data definitions (as contained in 114.1 CMR 17.00: Requirement for the Submission of Hospital Case Mix and Charge Data) should be noted.

Case Mix Data:
Case specific, discharge data which includes both clinical data, such as medical reason for admission, treatment, and services provided to the patient, and duration and status of the patient's stay in the hospital; and socio-demographic data, such as expected payor, sex, race, and patient zip code.

Charge Data
The full, undiscounted total and service specific charges billed by the hospital to the general public.

Ancillary Services
The service and their definitions as specified in the Commonwealth of Massachusetts Hospital Uniform Reporting Manual (HURM). [And as specified by the reporting codes and mapping scheme as listed in 114.1 CMR 17.06 (2) (c)]

Routine Services
The services and their definitions as specified in HURM s.3241, promulgated under 114.1 CMR 4.00. Reporting codes are defined in 114.1 CMR 17.06(2)(a) and include medical / surgical, obstetrics, and pediatrics.

Special Care Units
The units which provide patient care of a more intensive nature than provided to the usual medical, obstetric, or pediatric patient. These units are staffed with specially trained nursing personnel and contain monitoring and specialized support equipment for patients who require intense, comprehensive care.

3. General Data Caveats

The following general caveats stem from information gathered through conversations with members of the Rate Setting Commission Case Mix Data Advisory Group (CMDAG), staff at the Massachusetts Hospital Association, staff at the Massachusetts Health Data Consortium (MHDC), and the numerous and various admitting, medical record, financial, administrative, and data processing personnel who call to comment upon the Commission's procedural requirements.

Information may not be entirely consistent from hospital to hospital due to differences in:

- collection and verification of patient supplied information before or at admission;
- medical record coding, consistency, and completeness;
- extent of hospital data processing capabilities;
- flexibility of hospital data processing systems;
- varying degrees of commitment to quality of merged case mix and charge data;
- capacity of financial processing system to record late occurring charges on the Rate Setting Commission Tape;
- non-comparability of data collection and reporting.

Case Mix Data
In general terms, the case mix data, is derived from patient discharge summaries which can be traced to information gathered upon admission of from information entered by admitting and attending physicians into the medical record. The quality of case mix data is dependent upon hospital data collection policies and coding practices of the medical staff, as well as the DRG optimizing software used by the hospital.

Charge Data
Issues to consider with the charge data: A few hospitals do not have the capacity to add late occurring charges to the Rate Setting Commission tape within the current timeframes for submitting data. In some hospitals, "days billed" or "accommodation charges" do not equal the length of stay or the days that the patient spent in the hospital. One should note that charges are a reflection of hospital pricing strategy and may not be indicative of the cost of patient care delivery.

Expanded Data Elements
Care should also be used when examining data elements that have been expanded especially when analyzing multi-year trends. In order to maintain consistency across years, it may be necessary to merge some of the expended codes. For example, the Patient Disposition codes were expanded as of January 1, 1994 to include a new code for "Discharged/Transferred to a Rehab Hospital". Prior to this quarter, these discharges would have been reported under the code "Discharged/transferred to a chronic or rehab hospital" which itself was changed to "Discharged/transferred to chronic hospital". If performing an examination of these codes across years, one will need to combine the "rehab" and "chronic" codes in the data beginning January 1, 1994.

4. Specific Data Elements

The purpose of the following section is to provide the user with explanations of some data elements included in the 17.00 Regulation and to give a sense of their reliability.

A. Existing Data Elements

DPH Hospital ID Number
The Massachusetts Department of Public Health four digit number. (See Attachment IV.)

Patient Race
Due to misconceptions regarding the collection of race information, the Rate Setting Commission worked with the Massachusetts Commission Against Discrimination. The result was the mailing of a statement from the Massachusetts Commission Against Discrimination to all hospital administrators. This statement explained that asking for race information was voluntary and was not a form of discrimination.

The accuracy of the reporting of this data element for a given hospital is difficult to ascertain; therefore the user should be aware that the distribution of patients for this data element may not represent an accurate grouping of a given hospital's population.

Leave of Absence (LOA) Days
Hospitals are required to report these days to the Commission if they are used. At present, the Commission is unable to verify the use of these days if they are not reported nor can the Commission verify the number reported if a hospital does provide the information. Therefore, the user should be aware that the validity of this category relies solely on the accuracy of a given hospital's reporting practices.

Unique Health Identification Number (UHIN)
The patient's encrypted social security number.

Principal External Cause of Injury Code
The ICD-9 code which categorizes the event and condition describing the principal external cause of injuries, poisonings, and adverse effects. While the code itself is not new, the designated field and the requirement that the code be reported are new.

Unique Physician Number (UPN)
The encrypted Massachusetts Board of Registration in Medicine license number for the attending and operating physician.

Payor Codes
In 1994, payor information was been expanded to include payor type and payor source. Payor type is the general payor category such as HMO, Commercial, or Worker's Compensation. Payor Source is the specific health care coverage plan such as Harvard Community Health Plan or Aetna Life Insurance.

4. Specific Data Elements - *Continued*

Source of Admission
Three new sources have been added: ambulatory surgery, observation, and extramural birth (for newborns).

Patient Disposition
Four new discharge/transfer categories were added in January 1994: to another type of institution for inpatient care or referred for outpatient services to another institution, to home under care of a Home IV Drug Therapy Provider, to rehab hospital, and to rest home.

Accommodation and Ancillary Revenue Codes
These codes have been expanded to coincide with the current UB-92 Revenue Codes.

B. MRSC Calculated Fields

Admission Sequence Number
This calculated field indicates the chronological order of admissions for patients with multiple inpatient stays. A match with the UHIN only, is used to make the determination that a patient has had multiple stays. (Please read the comments below.)

Days Between UHIN Stays
This calculated field indicates the number of days between each discharge and each consecutive admission for applicable patients. Again, a match with the UHIN, only, is used to make the determination that a patient has been readmitted. (Please read the comments below.)

The MRSC has done some analyses of the UHIN data and in the process, has discovered problems with some of the reported data. For a few hospitals, no UHIN data exists as these hospitals failed to report patients' social security numbers (SSN). Other hospitals reported the same SSN repeatedly resulting in up to 83 admissions for one UHIN in one instance. In other cases the demographic information (age, sex, etc.) was not consistent when a match did exist with the UHIN. Some explanations for this include assignment of a mother's SSN to her infant or assignment of a spouse's SSN to a patient. This demographic analysis shows a probable error rate in the range of 2%-10%.

On average, the MRSC found that 91% of the SSN's submitted are valid when edited for compliance with rules issued by the Social Security Administration. Staff continually monitors the encryption process to ensure that duplicate UHINs are not inappropriately generated and that recurring SSN's consistently encrypt to the same UHIN. Only valid SSN's are encrypted to a UHIN; invalid SSN's are set to "---------".

Based on these findings, the MRSC strongly suggests that users of the MRSC calculated fields perform some qualitative checks of the data prior to drawing conclusions about that data.

PART 3 - HOSPITAL RESPONSES

1. Summary of Hospitals' Verification Report Responses
2. Summary of Reported Discrepancies by Category
3. Data Discrepancies and Correction Responses Received from Hospitals
4. Hospitals with Special Circumstances

Summary of Hospitals' Verification Report Responses

ID	Hospital	A	B	None	Comments
2016	Addison Gilbert			X	
2006	Anna Jaques			X	
2226	Athol Memorial				CAUTIONARY
2073	Atlanticare Medical Ctr.	X			
2339	Baystate Medical Center	X			
2313	Berkshire Medical Ctr.	X			
2069	Beth Israel Hospital	X			
2007	Beverly Hospital Corp.		X		
2307	Boston City Hospital	X			
2060	Boston Reg. Med. Ctr.	X			
2921	Brigham & Women's	X			
2118	Brockton Hospital			X	
2108	Cambridge Hospital			X	
2135	Cape Cod Hospital			X	
2003	Carney Hospital			X	
2337	Charlton Memorial	X			
2139	Children's Medical Ctr.			X	
2126	Clinton Hospital			X	
2155	Cooley Dickinson			X	
2335	Dana Farber	X			
2092	Deaconess Hospital	X			
2054	Deaconess-Glover			X	
2298	Deaconess-Nashoba			X	
2067	Deaconess-Waltham	X			
2018	Emerson Hospital	X			
2052	Fairview Hospital			X	
2289	Falmouth Hospital				NO DATA
2048	Faulkner Hospital		X		
2120	Franklin Medical	X			
2311 2101	Good Samaritan Cushing & Goddard Campus			X	
2143	Harrington Hospital			X	
2131	Haverhill Hospital				CAUTIONARY
2034 2127	Health Alliance Hospital Burbank Campus Leominster Campus			X	
2036	Heywood Mem. Hospital	X			
2231	Hillcrest	X			
2225	Holy Family	X			

Summary of Hospital Responses - Continued

DPH #	Hospital	A	B	None	Comments
2145	Holyoke			X	
2157	Hubbard Regional				
2082	Jordan	X			
2033	Lahey Hitchcock Clinic		X		
2099	Lawrence General			X	
2038	Lawrence Memorial	X			
2040	Lowell General			X	
2041	Malden			X	
2103	Marlborough	X			
2042	Martha's Vineyard	X			
2148	Mary Lane		X		
2167	Mass. Eye & Ear	X			
2168	Mass. General	X			
2077	Med. Ctr. Central Mass.	X			
2089	Med. Ctr. At Symmes			X	
2058	Melrose-Wakefield	X			
2149	Mercy	X			
2020	MetroWest Medical Ctr.			X	
2105	Milford-Whitinsville				CAUTIONARY
2227	Milton				CAUTIONARY
2022	Morton	X			
2071	Mt. Auburn		X		
2044	Nantucket Cottage			X	
2059	N. E. Baptist			X	
2299	N.E. Medical Center			X	
2075	Newton-Wellesley	X			
2076	Noble		X		
2061	North Adams Regional	X			
2114	Norwood Hospital			X	
2150	Providence	X			
2151	Quincy			X	
2063	Saints Memorial Med. Ctr.			X	
2014	Salem Hospital		X		
2001	Somerville Hospital				NO DATA
2107	South Shore Hospital			X	
2856	Southwood			X	

Summary of Hospital Responses - Continued

DPH #	Hospital	A	B	None	Comments
2011	St. Anne's	X			
2085	St. Elizabeth's	X			
2010	St. Luke's of N.B.	X			
2128	St. Vincent	X			
2100	Sturdy Memorial	X			
2106	Tobey			X	
2171	Transitional Hospital Corp. (JB Thomas)				NO DATA
2084	University Hospital	X			
2841	UMass. Med. Center		X		
2091	Vencor Hospital	X			
2046	Whidden Memorial	X			
2094	Winchester	X			
2181	Wing Memorial	X			

2. Summary of Reported Discrepancies by Category of Reported Data Errors

LIST OF ERROR CATEGORIES

- Accommodation Charges
- Ancillary Charges
- Routine Days
- Special Care Days
- Payor
- Age
- Race
- Sex
- Month of Discharge
- Total Number of Discharges
- Disposition
- Source of Admission
- Number of Diagnosis Codes Used Per Patient
- Number of Procedure Codes Used Per Patient
- DRGs
- Length of Stay

2. Summary of Reported Discrepancies By Category of Reported Data Error

Hospital	Accommodation Charges	Ancillary Charges	Routine Days	Payor	Age	Race	Sex	Month of Discharge
Beverly Hospital	X		X					
Faulkner Hospital				X				
Lahey Hitchcock Clinic	X	X		X	X	X	X	X
Mary Lane Hospital	X							
Mass. General Hospital	X							
Mount Auburn Hospital								
Noble Hospital	X	X		X	X	X	X	X
Salem Hospital								
St. Elizabeth Med. Ctr.*								
UMASS Medical Center			X	X				

* St. Elizabeth's Medical Center found the MRSC data to be consistent with the hospital's data. The hospital provided comments relative to its concerns about limitations of the data.

2. Summary of Reported Discrepancies By Category of Reported Data Error

Hospital	Total # Discharges	Disposition	Admit Type	Admit Source	# Diag Codes	# Proc Codes	Top 20 E-Code
Beverly Hospital		X				N/A	N/A
Faulkner Hospital					X		X
Lahey Hitchcock Clinic	X	X	X	X	X	X	X
Mary Lane Hospital							
Mass. General Hospital							
Mount Auburn Hospital	X						
Noble Hospital	X	X					
Salem Hospital	X						
St. Elizabeth Medical Center							
UMASS Medical Center							

2. Summary of Reported Discrepancies By Category of Reported Data Error

Hospital	Top 20 DRGs	Top 20 MDCs	DRGs	LOS
Beverly Hospital		N/A		
Faulkner Hospital	X	X	X	X
Lahey Hitchcock Clinic	X	X	X	X
Mary Lane Hospital				
Mass. General Hospital				
Mount Auburn Hospital				
Noble Hospital	X			X
Salem Hospital				
St. Elizabeth Medical Center				
UMASS Medical Center				

2. Summary of Reported Discrepancies By Category of Reported Data Error

Hospital Index

3. Data Discrepancies and Correction Responses Received from Hospitals

Beverly Hospital reported discrepancies in the areas of Disposition and Accommodation Charges. The hospital further indicated that the areas of # of Procedure Codes per Patient, Top 20 Principle ECODES, and Top 20 MDCs/Rank Order were not verified. The hospital has provided the following corrections to its FY1995 verification report.

BEVERLY HOSPITAL		
Category		
Disposition		
Detox	5	
Dept. of Social Services	10	
Hospice of No. Shore	35	
Rehab	842	
	MRSC	**Hospital**
Routine Days	61,608	53,838
Med/Surg	33,013 excluding detox	
Nursery	6,909	
Psych	4,304 with detox	

3. Data Discrepancies and Correction Responses Received from Hospitals

Faulkner Hospital reported discrepancies in the areas of Length of Stay, Payor, # Diagnosis Codes per Patient, # of Procedure Codes per Patient, DRG's, Top 20 DRGs/Rank Order, and Top 20 MDCs/Rank Order. The hospital was unable to verify Top 20 Principle ECODEs. The hospital has provided the following corrections to its FY1995 verification report.

FAULKNER HOSPITAL		
Category	**MRSC**	**Hospital**
Payor		
Self Pay	105	106
Medicare	3396	3395
Other Government	4	1
Blue Cross	387	383
Commercial Insurance	413	443
HMO	1100	1080
Free Care	244	243
BX Managed Care	174	173
PPO&Other Managed Care	59	58
Length of Stay		
3 Days	827	826
6 Days	505	504
8 Days	309	310
11-19 Days	583	584
Number of Diagnosis Codes per Patient		
1 Diagnosis Codes	288	287
2 Diagnosis Codes	575	572
3 Diagnosis Codes	719	708
4 Diagnosis Codes	745	749
5 Diagnosis Codes	722	722
7 Diagnosis Codes	626	631
8 Diagnosis Codes	540	536
9 Diagnosis Codes	1485	1503
Discharges per DRG		
DRG 15	35	34
113	5	4
124	33	31
125	6	5
132	216	215
138	84	83
148	61	62

FAULKNER HOSPITAL		
Category	**MRSC**	**Hospital**
DRG – Continued		
257	84	85
292	3	2
406	1	2
449	39	40
532	12	13
543	25	29
544	79	80
549	9	10
552	24	25
553	10	9
564	14	13
565	2	3
579	5	4
582	17	16
585	34	33
Number DRGs with Most Discharges		
DRG 132	216	215
257	84	85
138	84	83
544	79	80
MDC Discrepancies (including DRG 468-470)		
MDC 18	83	84
MDC 24	24	23
MDC Discrepancies (excluding DRGs 468-470)		
MDC 5	1345	1340
4	804	802
1	347	346
21	106	105
18	83	84
24	24	23

3. Data Discrepancies and Correction Responses Received from Hospitals

Lahey Hitchcock Clinic reported discrepancies in all areas. The hospital has provided the following letter of explanation.

Lahey Hitchcock Clinic has carefully reviewed the FY1995 Final Casemix Verification Report. We do not believe the data as it appears on the Verification Report accurately represents the hospital's case mix profile. One hundred and seventy-three cases are missing. We will be resubmitting all four quarterly case mix tapes to correct the data. It is our goal to have these tapes to you within four weeks.

3. Data Discrepancies and Correction Responses Received from Hospitals

Mary Lane Hospital reported discrepancies in the area of Accommodation Charges. The hospital submitted the following statement as an explanation.

Coronary Care Unit – The case mix tapes submitted identified Coronary Care activity. Mary Lane Hospital does not have a coronary care unit. All days, discharges, and charges reported as Coronary Care relate to a Routine Stepdown Medical Surgical accommodation.

3. Data Discrepancies and Correction Responses Received from Hospitals

Massachusetts General Hospital reported discrepancies in the area of Accommodation Information. The hospital identified a classification issue regarding accommodation charges categorized on the hospital's database affecting pediatric routine and adult routine charges. Although the issue resulted in an overstatement of adult routine charges and an understatement of pediatric routine charges, total charges were properly stated.

3. Data Discrepancies and Correction Responses Received from Hospitals

Mt. Auburn Hospital reported discrepancies in the area of Number of Discharges. Although the hospital was unable to explain the discrepancies, it noted that it had quite a few more patients on Observation status during FY1995, and that those patients occupied inpatient beds but were not in the data since they became outpatients.

The hospital provided the following corrections to its FY1995 verification report.

MOUNT AUBURN HOSPITAL		
Category	**MRSC**	**Hospital**
Discharge Information		
Number of Discharges	11,947	11,951

3. Data Discrepancies and Correction Responses Received from Hospitals

Noble Hospital reported discrepancies in the areas of Age, Sex, Race, Payor, Length of Stay, Disposition, Month of Discharge, Accommodation Charges, Ancillary Charges, Top 20 DRGs / Rank Order, and # of Discharges. The hospital indicated that although most of the differences were immaterial, there were three issues worth highlighting. First, the hospital's submissions improperly coded patients discharged to Rehabilitation as being discharged to Psychiatric. Second, the first two quarterly submissions improperly grouped Rehabilitation accommodation days and charges Medical/Surgical. Third, Ambulatory Surgery Care ancillary revenue equaling approximately $63,000 was included in Other category. For FY1996, the hospital corrected the first two issues and was in the process of reconciling the third. The hospital has provided the following corrections to its FY1995 verification report.

NOBLE HOSPITAL		
Category	**MRSC**	**Hospital**
Patient Sex		
Female	1,703	1,704
Patient Race		
Hispanic	80	81
Length of Stay	238	239
Patient Disposition		
Home	2,015	2,016
Psych	138	23
Rehab	0	115
Patient Age		
45-64	491	492
Patient Days		
Med/Surg	12,571	11,855
Pediatric	48	39
Psych	5,966	5,965
Rehab	1,997	2,574
ICU	1,092	1,058
Total	21,674	21,675
Accommodation Charges		
Med/Surg	6,055,770	5,727,563
Pediatric	22,404	22,402
Psych	3,519,907	3,519,872
Rehab	1,652,068	1,980,110
ICU	1,237,783	1,237,847
Total	12,487,932	12,487,794
Discharge Month		
Total	2,862	2,863

NOBLE HOSPITAL		
Category	**MRSC**	**Hospital**
Primary Payor		
Other Non-Managed	24	8
Self Pay	82	119
Workers Comp	14	12
Medicare	1,849	1,849
Medicaid	322	325
Other Govt.	7	7
Blue Cross	82	93
Comm. Ins.	200	206
HMO	129	181
Free Care	58	14
BX Managed Care	34	20
Com. Managed	32	12
PPO & Other Managed	29	17
Total	2,862	2,863
Ancillary Charges		
Pharmacy	1,887,065	1,887,094
IV Therapy	445,640	445,631
M/S Supply	1,123,817	1,124,437
Laboratory	2,340,673	2,348,448
Radiology	644,274	609,124
Nuclear	116,281	73,415
CT	624,570	611,802
Surgery	1,687,162	1,687,043
Anesthesia	315,982	315,085
Blood Store	235,709	235,714
Respiratory	1,222,553	1,222,452
Physical Therapy	486,970	486,914
Occupational Therapy	289,488	289,470
Speech Pathology	94,766	94,763
Emergency	292,342	292,253
Pulmonary	65,885	65,852
Cardiology	194,418	194,408
Ambulatory Surgical Care	56,912	119,950
Ambulance	8,721	8,721
Recovery	107,246	107,253
EKG/EEG	335,818	335,763
EEG	4,901	1,913
Psych	1,096	1,095
Other Diag Svc	34,851	34,881
Other	143,659	73,415
Ultrasound	0	72,900
MRI	0	14,759

3. Data Discrepancies and Correction Responses Received from Hospitals

Salem Hospital reported discrepancies in the area of Number of Discharges. The hospital indicated that the MRSC data for Salem Hospital was accurate for the 13,368 discharges submitted on quarterly case mix tapes. However, there was one Q4 discharge missing, which was not sent on the quarterly case mix tape due to incomplete data. The hospital has provided the following corrections to its FY1995 verification report.

SALEM HOSPITAL		
Category	**MRSC**	**Hospital**
Discharge Information		
Number of Discharges	13,368	13,368

ST. ELIZABETH'S MEDICAL CENTER

St. Elizabeth's Medical Center submitted an A response to the data verification process, indicating its agreement that the FY1995 data as it appeared on the Casemix Verification Report was the data that was submitted to the Commission, and that it accurately represented the hospital's casemix profile. However, the A Response was subject to the points raised in the following letter.

In response to your request to verify the St. Elizabeth's Hospital merged case mix/billing data for FY1995 we have validated the data and provided background information on the charge data for those who will be using these reports in the future. We feel it is essential that users recognize the limitations of these data.

Our principal concern with the data release this year involves the accuracy of the data for the new payor codes and for the encrypted physician identification.

(1) Payor Types – When the Payor code is for a managed care plan there are several sources of error. Most notably, not all hospitals are using the new codes, some are unable to code Medicare-HMO or Medicaid-HMO correctly, health plans with multiple products are subject to miscoding, and an incorrect code may be reported if a change in patient coverage is determined after discharge.

(2) Physician Code – The verification report does not include verification data for the encrypted Physician Identifier, not do the hospitals have these codes for purposes of verification. Any errors in this field would not be detected.

Otherwise, in our testing of the validation data, we found both the general statistical data and the DRG counts based on the N.Y. All-Patient Grouper Version 8.1 to be consistent with internal reports generated by the hospital.

For users of these data, we would emphasize that other FY1995 DRG reports with which they are comparing or trending data may be based on a different grouper. It is important to be alert to differences in specific DRG counts, which result from basic differences in the Grouper logic, and from annual changes to each Grouper to refine individual DRGs. These Grouper differences have a strong impact on the data for the affected disease categories.

As you are aware, it is essential to recognize in any use of this information that it is not correct to make comparisons with similar data in other St. Elizabeth's Hospital reports or with similar data from other hospitals, without first reconciling all data on a line item by item basis. Simplistic Comparisons of these FY1995 case mix/charge data among hospitals cannot result in conclusions that are credible for FY1995 much less valid for other years for a variety of reasons, which include the following:

ST. ELIZABETH'S MEDICAL CENTER - *Continued*

1. Medical Records Documentation

With changes in the reimbursement system Medical Records have become the primary means of documenting the need for all resources used in caring for the patient. The systems to provide this documentation of complete diagnostic information, including differences in the severity of illness of patients with the same diagnosis, are under development. They therefore vary in their level of sophistication from hospital to hospital.

As a result, comparative case mix complexity indices may reflect differences in coding practices among hospitals, in addition to differences in the type of patient treated. Further, the DRG Patient Classification System is inadequate to document differences in the severity of illness, or in the stage of disease, of patients who fall within the same DRG. Clearly, these factors affect the resources needed to care for patients, and require further development and documentation.

2. Charge Structures Vary significantly among hospitals and from year to year

-Services included in the charge structure differ among hospitals within any given year. For example: Physician components may be included in one hospital's charge while in another it may not. If Hospital A pays its Radiologists for reading X-Rays, Radiology charges will be included with other patient charges. On the other hand, at Hospital B the physicians may be billing the patients directly and these charges will not be included in the Hospital's accounts.

-An individual hospital's charge structure may change substantially from year to year. Each hospital is free to adjust charges as it deems appropriate within the literally thousands of accounts. Hospitals may make charge adjustments at various times during the year (monthly, quarterly, or once annually). One hospital may decide to adjust only room and board charges. Another may adjust all charges across the board.

2. Inaccuracies of cost comparisons that depend on cost/charge ratios (RCCs) when these data are used in conjunction with data in the 403 cost reports.

a. RCCs – The RCCs do not in any way reflect true costs. They are at best estimates of average costs net of income recoveries. They are influenced by the various methodologies among hospitals for grouping accounts included in the 403 cost centers, by the various allocation methodologies that are employed, and by the series of issues referenced above related to differences in hospital charge structures.

ST. ELIZABETH'S MEDICAL CENTER – *Continued*

For example:

(1) One hospital may generate twice as much parking income as another hospital of similar size. The full cost of the parking operations at the two may be the same, but clearly the cost/charge ratios will differ.

(2) Since RCCs reflect only average costs, they break down further when small numbers are involved, as they are at the procedural level. True costs of procedures will vary with the time or day of the week, depending on such factors as differences in the staffing involved, comparable procedures performed at the same time, etc. An Open Heart procedure scheduled in advance is less costly that one performed on an emergency basis on a weekend evening. Averages also break down in looking at incremental costs. The cost of performing the "next" Open Heart Procedure will be much less at an institution with high levels of fixed costs rather than in a hospital with high levels of variable costs.

b. Differences in data accumulation in the 403 Cost Report and the Case Mix/Billing Tapes

Analysis of these charge data in conjunction with financial data in the 403 Cost Reports is further complicated by the differences in data accumulation for these reports, which are generated for different uses. Two major factors result in data, which are not comparable:

(1) There are differences in the cut-off points. The Case Mix system accumulates data on the basis of all charges accumulated prior to a patient's discharge, while the 403 accumulates charges posted to patient accounts with dates of service within a fiscal year.

Impact: The 403 Report includes charges posted to patient accounts before the patient is discharged; final billing must be completed before charges accumulate on the Case Mix tape.

(2) The cost center summary level grouping of accounts defined for the Case Mix tapes differ from various groupings used by individual hospitals in preparing their 403 Cost Reports. These differences will vary from year to year, and among different hospitals in any given year.

3. Data Discrepancies and Correction Responses Received from Hospitals

UMASS Medical Center reported discrepancies in the areas of Payor and Routine Days. The hospital stated that its billing and abstracting systems were converted to a different vendor's system on 5/1/95. The first ten months of FY1995 data originated from the old system, and the last two months reflect data from the new system. The new system provides expanded capabilities to collect information. The hospital has provided the following corrections to its FY1995 verification report.

UMASS MEDICAL CENTER		
Category	**MRSC**	**Hospital**
Accommodation Information		
Medical/Surgical (111)		
Total Days	15,473	11,881
Pediatrics (113)		
Total Days	2,259	5,851
Payor Information		
Blue Cross (6)	140	777
Commercial Insurance (7)	2,437	1,608

4. Hospitals with Special Circumstances

Deaconess-Glover Hospital has five quarters of data on the fiscal year 1995 database. The reason for this is that Deaconess Glover hospital was reporting data on a July 1 fiscal year previous to the merge with Deaconess Hospital.

Baystate Medical Center provided the MRSC with information relative to specific discharges contained in the database. As explained in the Technical Documentation, these specific discharges have been "flagged". The purpose of the "flag" is to alert users of the data that these specific discharges are atypical discharges. Following this page are letters and memos the hospital has provided for inclusion in the documentation. These letter and memos explain why the hospital believes the discharges to be atypical.

The discharges that have been "flagged" for Baystate Medical Center are those patients who were discharged from the hospital's licensed long-term care unit. Please note the related physician specific data comments.

Please refer to the letters and memos which follow for a more detailed discussion of these discharges.

Text of Letter Received from Baystate Medical Center – February 7, 1996

On the following page is a letter describing the patient population on the Long Term Care Unit (Wesson Memorial Unit) at Baystate Medical Center. This unique unit provides a comprehensive service to an extremely ill population, many of whom typify the problems Baystate confronts dealing with the sociodemographics of Springfield. The services provided are sometimes acute but more often subacute, chronic, and palliative, depending upon the need of the individual patient. However, the majority of patients are there with the expectation that their diseases are incurable. Therefore, the actual mortality rate and lengths-of-stay are what is expected from this gravely ill population.

Unfortunately, as we had discussed, the insidious use of this data by unknowledgeable third parties as a means of "measuring outcomes" from acute hospitalizations is terribly misleading. If Baystate Medical Center must submit the claims data on this population mixed with the acute care data sets of all our patients, there must be an alternative database to which this data is transmitted and stored.

In addition, **physician specific data** attached to this patient population must be teased out from the acute data sets in order to prevent inappropriate harassment of the physicians caring for these patients who would *appear* to have high death rates and long lengths of stay, as well as high total charges and possibly greater numbers of complications – all of which have nothing to do with the capabilities of the attending physicians who are associated with the discharges of these patients. This is particularly true for the physicians who have served as Medical Directors of the Unit who would have grossly distorted data, particularly if these physicians only care for patients on the Long Term Care Unit (e.g., myself).

Signed,
Leslie G. Selbovitz, M.D.
Medical Director, Quality, Utilization Risk
Management and Long Term Care

BAYSTATE MEDICAL CENTER
PATIENT MIX ON THE LONG TERM CARE UNIT
(WESSON MEMORIAL UNIT – WEST 3)

There are a variety of patients requiring long-term care on this geographically separated Unit. Below are examples of patient populations:

1. End stage chronic organ failure for which attempts at out of hospital placement have been unsuccessful.
2. Patients requiring 24 hour per day parenteral pain management, including epidurally, intravenously and subcutaneously.
3. General palliative care.
4. End stage AIDS and cancer patients who cannot receive appropriate intensity of services out of hospital.
5. Patients requiring aggressive interventions for Stage III and Stage IV decubiti superimposed upon other chronic medical illnesses.
6. Severely chronically diseased patients who reside on the Long Term Care Unit with relative stability of chronic illnesses but who cannot obtain placement elsewhere.
7. Patients with ongoing respiratory compromise who are maintained without ventilators due to the high intensity intervention by nurses and respiratory therapists.
8. Patients requiring hyperalimentation.
9. Patients requiring peritoneal dialysis with unstable cardiac status.
10. Long term parenteral antibiotic administration for endocarditis or osteomyelitis.
11. Alzheimer and other chronic degenerative diseases of the brain who have failed to gain placement out of hospital.

Patients gain admission with these long-term care problems by one of two scenarios. First, since the Unit is licensed under the hospital's acute care license, the majority of patients come into the Springfield Hospital Unit (North Campus) having met acute hospital level of care criteria. Patients from the acute care units are subsequently transferred to the Long Term Care Facility (South Campus) due to the inability to find alternative facilities – independent of the "leveling" which is done in accordance with Medicare and Medicaid criteria for acute hospital level of care, skilled nursing facility level of care (active searches for SNF takes place), ANDs (administratively necessary days) or outright termination of benefits. Rarely, a patient meeting acute hospital level criteria will be admitted directly to the Long Term Care Unit.

The other principal route of admission to the Unit is for hospice patients through a contract with Pioneer Valley Hospice.

This 50-bed Unit has approximately 150 discharges per year, of which approximately 65% die expectedly. The length of stay ranges from a few weeks to several months to years (the latter for the chronics who cannot find placement elsewhere).

The Long Term Care Unit is separately surveyed and accredited by the JCAHO as a Long Term Care facility.

BAYSTATE MEDICAL CENTER			
FY'95 Patients Discharged from Long Term Care Unit (Reported on RSC Tapes in Accommodation Code 209)			
DRG	**LTCU Days**	**RSC Code**	**Routine Charges**
7	7	20	2,799.00
10	11	20	2,490.70
10	12	20	2,061.10
10 – Total	23		4,551.80
11	45	20	17,550.00
11	14	20	2,730.00
11	8	20	3,120.00
11 – Total	67		23,400.00
12	12	20	4,680.00
14	1	20	390.00
35	9	20	3,574.30
64	6	6	2,340.00
64	24	6	9,881.60
64 – Total	30		12,221.60
76	14	1	1,170.00
76	7	20	2,730.00
76 – Total	21		3,900.00
82	2	20	970.70
82	2	20	760.00
82	2	20	780.00
82	1	6	390.00
82	11	1	2,730.00
82	16	20	6,304.30
82	8	20	3,670.00
82	10	20	4,148.60
82	25	20	4,602.00
82	1	20	390.00
82	1	20	390.00
82	5	20	2,325.80
82	15	3	5,850.00
82	66	20	23,631.60
82	8	20	3,120.00
82	3	20	1,170.00
82	3	20	1,185.30
82	40	6	15,738.30
82	4	20	1,560.00
82	10	1	3,900.00
82	2	20	780.00
82	5	20	2,205.80
82 - Total	240		86,602.40

BAYSTATE MEDICAL CENTER			
FY'95 Patients Discharged from Long Term Care Unit (Reported on RSC Tapes in Accommodation Code 209)			
DRG	**LTCU Days**	**RSC Code**	**Routine Charges**
89	25	6	6,480.00
123	57	20	17,200.10
127	19	20	7,410.00
127	8	20	3,120.00
127	18	6	7,020.00
127	5	20	1,950.00
127 – Total	50		19,500.00
130	10	3	483.70
130	51	20	12,602.20
130 – Total	61		13,085.90
132	16	20	6,729.10
154	1148	20	396,812.20
170	58	3	23,209.40
170	34	20	13,945.20
170	17	6	7,012.60
170 – Total	109		44,167.20
172	11	6	4,290.00
172	4	20	1,809.40
172	3	20	1,170.00
172	14	20	5,646.20
172 – Total	32		12,915.60
173	8	20	3,120.00
174	18	20	7,474.60
182	42	6	16,538.00
183	8	6	3,120.00
201	1	20	390.00
202	246	5	93,718.40
203	3	20	1,170.00
203	95	20	29,460.70
203	3	1	1,234.30
203	27	3	10,530.00
203	4	20	1,770.70
203	13	20	5,162.00
203	12	6	4,975.20
203 - Total	157		54,302.90
205	38	2	7,230.70
209	118	1	40,180.80
210	262	5	84,531.50
233	2	1	780.00

BAYSTATE MEDICAL CENTER			
FY'95 Patients Discharged from Long Term Care Unit (Reported on RSC Tapes in Accommodation Code 209)			
DRG	**LTCU Days**	**RSC Code**	**Routine Charges**
236	30	3	10,505.40
239	4	20	1,720.70
239	54	20	21,308.60
239	17	20	4,928.60
239	34	1	7,020.00
239	26	3	10,350.70
239	5	6	1,964.70
239	53	20	15,495.10
239	11	3	4,290.00
239	4	20	1,560.00
239 - Total	208		68,638.40
263	90	6	24,582.20
269	4	20	1,560.00
274	9	6	3,510.00
277	9	1	1,950.00
294	22	3	9,370.10
296	11	20	4,305.30
296	7	20	2,815.90
296	5	20	1,995.90
296	2	20	810.60
296	89	20	38,243.20
296 - Total	114		48,170.90
304	29	20	7,084.30
316	1	20	390.00
316	7	6	2,730.00
316 – Total	8		3,120.00
318	1	20	390.00
320	146	20	51,543.20
320	33	20	1,770.70
320 – Total	179		53,313.90
346	1	20	390.00
346	14	3	5,881.40
346 – Total	15		6,271.40
395	61	3	23,874.10
395	1	20	420.60
395 – Total	62		24,294.70
398	11	20	4,500.70
401	36	20	10,984.30
402	21	20	8,190.00

BAYSTATE MEDICAL CENTER			
FY'95 Patients Discharged from Long Term Care Unit (Reported on RSC Tapes in Accommodation Code 209)			
DRG	**LTCU Days**	**RSC Code**	**Routine Charges**
403	22	3	6,488.60
403	4	6	1,597.90
403	1	20	390.00
403	26	1	6,630.00
403 - Total	53		15,106.50
404	4	1	1,560.00
404	3	20	1,170.00
404 – Total	7		2,730.00
413	20	20	3,708.40
425	9	3	3,510.00
429	253	1	79,117.70
429	12	5	4,680.00
429	37	1	8,190.00
429 – Total	302		91,987.70
463	29	3	9,204.70
472	140	5	33,100.00
475	52	20	3,030.90
477	1,305	20	468,438.10
477	26	20	4,890.70
477 – Total	1,331		473,328.80
482	12	20	3,334.60
533	3,100	20	937,904.50
533	1	20	390.00
533	35	20	1,170.00
533 – Total	3,136		939,464.50
539	11	20	4,290.00
541	68	20	18,220.20
541	1	20	0
541	270	20	98,599.80
541	64	20	5,486.90
541	16	20	6,565.20
541	25	6	7,329.70
541	12	20	3,120.00
541	7	20	3,356.30
541	8	20	1,850.90
541	5	20	2,160.70
541 - Total	476		146,689.70
543	22	20	8,580.00
544	34	6	8224.50
544	26	20	6,345.05
544 – Total	60		14,569.55

BAYSTATE MEDICAL CENTER			
FY'95 Patients Discharged from Long Term Care Unit (Reported on RSC Tapes in Accommodation Code 209)			
DRG	**LTCU Days**	**RSC Code**	**Routine Charges**
549	220	3	69,138.90
550	477	20	222,358.20
550	80	3	19,350.00
550 – Total	557		241,708.20
552	123	20	36,978.90
552	56	20	11,602.80
552	15	20	1,950.00
552 – Total	194		50,531.70
553	31	6	6,579.30
555	91	6	20,009.60
555	22	20	2,730.00
555 – Total	113		22,739.60
556	24	20	1,950.00
556	16	20	6,432.50
556 – Total	40		8,382.50
557	480	20	177,665.40
557	19	20	7,210.00
557	12	20	2,371.60
557	3	20	1,170.00
557 – Total	514		188,417.00
558	153	6	56,770.00
558	120	6	19,348.70
558	84	20	6,857.80
558	23	3	4,202.20
558 – Total	380		87,178.70
559	37	3	18,371.70
559	16	20	3,510.00
559 – Total	53		21,881.70
561	19	20	491.00
562	8	7	3,120.00
564	41	6	15,831.20
569	844	20	277,314.70
574	70	3	21,876.50
575	50	1	6,630.00
578	24	20	600.70
578	59	5	2,640.80
578	52	20	9,282.60
578 – Total	135		12,524.10
579	79	20	27,568.80
585	60	6	4,979.70

BAYSTATE MEDICAL CENTER			
FY'95 Patients Discharged from Long Term Care Unit (Reported on RSC Tapes in Accommodation Code 209)			
DRG	**LTCU Days**	**RSC Code**	**Routine Charges**
701	74	20	25,651.30
702	14	6	5,460.00
705	44	20	8,519.40
705	36	20	7,447.90
705 – Total	80		15,967.30
707	110	20	37,010.70
707	30	6	7,800.00
707	12	20	1,560.00
707 – Total	152		46,370.70
708	189	20	62,010.00
708	82	20	32,157.40
708	27	20	8,114.80
708	36	1	10,920.00
708	25	20	8,183.10
708	31	20	9,615.95
708	16	20	6,518.30
708	100	20	34,216.50
708	40	20	5,596.20
708	43	20	14,040.00
708	103	6	31,980.00
708	13	6	5,070.00
708	17	20	390.00
708	75	20	22,092.60
708	35	20	4,455.00
708	99	1	38,611.80
708	3	20	1,170.00
708	77	20	24,068.20
708	35	20	11,337.80
708	13	20	3,510.00
708 – Total	1,059		334,057.65
710	42	6	15,265.90
710	35	20	12,690.70
710 – Total	77		27,956.60
711	252	20	93,440.70
711	1	20	390.00
711	20	6	5,460.00
711	54	5	19,267.60
711	7	20	2,940.70
711 – Total	334		121,499.00

BAYSTATE MEDICAL CENTER			
FY'95 Patients Discharged from Long Term Care Unit (Reported on RSC Tapes in Accommodation Code 209)			
DRG	**LTCU Days**	**RSC Code**	**Routine Charges**
714	1	20	390.00
714	34	20	9,960.70
714	1	20	600.70
714	13	20	5,070.00
714	24	1	6,992.80
714	46	6	18,000.90
714	66	5	23,336.90
714	1	20	0
714 – Total	186		64,352.00
756	8	6	3,190.20
777	4	1	156.80
782	10	3	3,900.00
213	**14,722**		**4,724,892.90**

PART 4 – CAUTIONARY USE FILE

Part 4 – Cautionary Use File

This file contains data from those hospitals which either submitted fewer than four quarters of data or submitted less than four quarters of data which passed the edit program.

Four hospitals failed to submit all four quarters of data which met the requirements of Regulation 114.1 CMR 17.00.

Athol Memorial Hospital: Data submitted for quarter one passed the edit program. Quarters two, three and four did not pass the edit program due to revenue code errors.

Haverhill Municipal (Hale) Hospital: Submitted data for quarters one, two, and three passed the edit program. No submission for quarter four.

Milford-Whitinsville Regional Hospital: Submitted data for quarters one, two, and three passed the edit program. No submission for quarter four.

Milton Hospital: Data submitted for quarters one, two and three passed the edit program. Quarter four did not pass the edit program due to overall programming problems.

PART 4A
HOSPITALS THAT DID NOT SUBMIT DATA FOR FY 1995:

(1) Falmouth Hospital
(2) Somerville Hospital
(3) Transitional Hospital Corporation

PART 5 – ATTACHMENTS

Attachment I – Type A & Type B Errors
Attachment II – Content of Verification Report Package
Attachment III – Profile: Hospital, Address, DPH Hospital ID Number
Attachment IV – Summary: Mergers, Name Changes, Closures & Conversions

Attachment I – Type A & B Errors

TYPE 'A' ERRORS

Record Type
Submitter Name
Receiver ID
DPH Hospital Computer Number
Type of Batch
Period Starting Date
Period Ending Date
Patient Medical Record Number
Patient Sex
Patient Birth Date
Patient Over 100 Years Old
Admission Date
Discharge Date
Patient Status
Billing Number
Claim Certificate Number
Primary Source of Payment
Primary Payor Type
Secondary Payor Type
Revenue Code
Units of Service
Total Charges (by Revenue Code)
Principal Diagnosis Code
Associate Diagnosis Code (I-IV)
Principal Procedure Code
Significant Procedure Codes (I-II)
Number of ANDs
Physical Record Count
Record Type 2x Count
Record Type 3x Count
Record Type 4x Count
Record Type 5x Count
Total Charges: Special Services
Total Charges: Routine Services
Total Charges: Accommodations
Total Charges: Ancillaries
Total Charges: All Charges
Number of Discharges
Submitter Employer Identification Number (EIN)
Number of Providers on Tape
Count of Batches
Batch Counts (11, 22, 33, 99)

Attachment I – Type A & B Errors - Continued

TYPE B ERRORS
Patient Race
Type of Admission
Source of Admission
Patient Zip Code
Attending Physician Numbers (Board of Registration & Hospital Internal)
Operating Physician Numbers (Board of Registration & Hospital Internal)
Date of Principal Procedure
Date of Significant Procedures (I & II)
Veteran Status
Patient Social Security Number
Birth Weight in Grams
External Cause of Injury Code
Secondary Source of Payor

Attachment II

Contents of Hospital Verification Report Package

- Seven Page Frequency Distribution Report containing the following data elements:

  - Total Number of Discharges
  - Type of Admission
  - Source of Admission
  - Month of Discharge
  - Age
  - Sex
  - Race
  - Payor
  - Length of Stay
  - Disposition Status
  - Number of Diagnosis Codes Used per Patient
  - Number of Procedure Codes Used per Patient
  - Accommodation Charge Information
  - Ancillary Charge Information

- Complete Listing of Discharges per DRG

- Top 20 DRG's in Rank Order

- Major Diagnostic Categories (MDC's) in Rank Order

- Top 20 Principal E Codes

- Response Sheet: Completed by hospitals and returned to the Rate Setting Commission

NOTE: The hospital's profile of cases, grouped by AP-DRG 8.1, is part of the verification report. It is this grouped profile on which the hospitals commented. The Commission urged hospitals to use the All-Patient-DRG Grouper, Version 8.1 with the same system specifications as used by the MRSC.

Attachment III – Hospital Profile: Hospital, Address, DPH Number

Addison Gilbert Hospital
298 Washington Street
Gloucester, MA 01930
DP H ID #: 2016

Anna Jaques Hospital
25 Highland Avenue
Newburyport, MA 01950
DPH ID #: 2006

Athol Memorial Center
2033 Main Street
Athol, MA 01331
DPH ID #: 2226

AtlantiCare Medical Center
212 Boston Road
Lynn, MA 01904
DPH ID #: 2073

Baystate Medical Center, Inc.
759 Chestnut Street
Springfield, MA 01199
DPH ID #: 2339

Berkshire Medical Center
725 North Street
Pittsfield, MA 01201
DPH ID #: 2313

Beth Israel Hospital
330 Brookline Avenue
Boston, MA 02215
DPH ID #: 2069

Beverly Hospital Corporation
Herrick Street
Beverly, MA 01915
DPH ID #: 2007

Boston City Hospital
818 Harrison Avenue
Boston, MA 02118
DPH ID #: 2307

Attachment III – Hospital Profile: Hospital, Address, DPH Number

Boston Regional Medical Center
5 Woodland Road
Stoneham, MA 02180
DPH ID #: 2060

Brigham & Women's Hospital
10 Vining Street
Boston, MA 02115
DPH ID #: 2921

Brockton Hospital
680 Centre Street
Brockton, MA 02402
DPH ID #: 2118

Cambridge Hospital
1493 Cambridge Street
Cambridge, MA 02139
DPH ID #: 2108

Cape Cod Hospital
27 Park Street
Hyannis, MA 02601
DPH ID #: 2135

Carney Hospital
2100 Dorchester Avenue
Boston, MA 02124
DPH ID #: 2003

Charlton Memorial Hospital
Highland Avenue @ New Boston Road
Fall River, MA 02720
DPH ID #: 2337

Children's Hospital
300 Longwood Avenue
Boston, MA 02115
DPH ID #: 2139

Clinton Hospital
201 Highland Street
Clinton, MA 01510
DPH ID #: 2126

Cooley Dickinson Hospital, Inc.
30 Locust Street
Northhampton, MA 01061-5001
DPH ID #: 2155

Attachment III – Hospital Profile: Hospital, Address, DPH Number

Dana Farber Cancer Institute
44 Binney Street
Boston, MA 02115-6084
DPH ID #: 2335

Deaconess Hospital
185 Pilgrim Road
Boston, MA 02215
DPH ID #: 2092

Deaconess-Glover Hospital
148 Chestnut Street
Needham, MA 02192
DPH ID #: 2054

Deaconess-Nashoba Hospital
200 Groton Road
Ayer, MA 01432
DPH ID #: 2298

Deaconess-Waltham Hospital
Hope Avenue
Waltham, MA 02254-9116
DPH ID #: 2067

Emerson Hospital
P.O. Box 9120
Concord, MA 01742-9120
DPH ID #: 2018

Fairview Hospital
29 Lewis Avenue
Great Barrington, MA 01230
DPH ID #: 2052

Falmouth Hospital
100 Ter Heun Avenue
Falmouth, MA 02540
DPH ID #: 2289

Faulkner Hospital
1153 Centre Street
Boston, MA 02130
DPH ID #: 2048

Franklin Medical Center
164 High Street
Greenfield, MA 01301 - DPH ID #: 2120

Attachment III – Hospital Profile: Hospital, Address, DPH Number

Good Samaritan Medical Center - Cardinal Cushing & Goddard Campus
909 Summer Street
Stoughton, MA 02072
DPH ID #: 2311 (Cushing) #2101 (Goddard)

Harrington Memorial Hospital
100 South Street
Southbridge, MA 01550-8002
DPH ID #: 2143

Haverhill Municipal Hale Hospital
140 Lincoln Avenue
Haverhill, MA 01830
DPH ID #: 2131

Health Alliance Hospital, Inc. – Burbank Campus & Leominster Campus
275 Nichols Road
Fitchburg, MA 01420
DPH ID #: 2034 (Burbank), #2127 (Leominster)

Heywood Memorial Hospital
242 Green Street
Gardner, MA 01440
DPH ID #: 2036

Hillcrest Hospital
165 Tor Court
Pittsfield, MA 01201
DPH ID #: 2231

Holy Family Hospital
70 East Street
Methuen, MA 01844
DPH ID #: 2225

Holyoke Hospital, Inc.
575 Beech Street
Holyoke, MA 01040
DPH ID #: 2145

Hubbard Regional Hospital
340 Thompson Road
Webster, MA 01570
DPH ID #: 2157

Jordan Hospital, Inc.
275 Sandwich Street
Plymouth, MA 02360
DPH ID #: 2082

Attachment III – Hospital Profile: Hospital, Address, DPH Number

Lahey Hitchcock Clinic
41 Mall Road
Burlington, MA 01805
DPH ID #: 2033

Lawrence General Hospital
One General Street – P.O. Box 189
Lawrence, MA 01842-0389
DPH ID #: 2099

Lawrence Memorial Hospital
170 Governors Avenue
Medford, MA 02155
DPH ID #: 2038

Lowell General Hospital
295 Varnum Avenue
Lowell, MA 01854
DPH ID #: 2040

Malden Hospital
100 Hospital Road
Malden, MA 02148
DPH ID #: 2041

Marlborough Hospital
57 Union Street
Marlborough, MA 01752
DPH ID #: 2103

Martha's Vineyard Hospital
P.O. Box 1477
Oak Bluffs, MA 02557
DPH ID #: 2042

Mary Lane Hospital
85 South Street
Ware, MA 01082
DPH ID #: 2148

Massachusetts Eye & Ear Infirmary
243 Charles Street
Boston, MA 02114
DPH ID #: 2167

Massachusetts General Hospital
55 Fruit Street
Boston, MA 02114
DPH ID #: 2168

Attachment III – Hospital Profile: Hospital, Address, DPH Number

Medical Center of Central MA
119 Belmont Street
Worcester, MA 02715
DPH ID #: 2077

Medical Center at Symmes
39 Hospital Road
Arlington, MA 02174
DPH ID #: 2089

Melrose-Wakefield Hospital
585 Lebanon Street
Melrose, MA 02176
DPH ID #: 2058

Mercy Hospital
271 Carew Street
Springfield, MA 01102
DPH ID #: 2149

MetroWest Medical Center, Inc.
67 Union Street
Natick, MA 01760
DPH ID #: 2020

Milford-Whitinsville Hospital
14 Prospect Street
Milford, MA 01757
DPH ID #: 2105

Milton Medical Center
92 Highland Street
Milton, MA 02186
DPH ID #: 2227

Morton Hospital & Medical Center
88 Washington Street
Taunton, MA 02780
DPH ID #: 2022

Mount Auburn Hospital
330 Mt. Auburn Street
Cambridge, MA 02138
DPH ID #: 2071

Nantucket Cottage Hospital
57 Prospect Street
Nantucket, MA 02554
DPH ID #: 2044

Attachment III – Hospital Profile: Hospital, Address, DPH Number

New England Baptist Hospital
125 Parker Hill Avenue
Boston, MA 02120
DPH ID #: 2059

New England Medical Center
750 Washington Street
Boston, MA 02111
DPH ID #: 2299

Newton-Wellesley Hospital
2014 Washington Street
Newton, MA 02162
DPH ID #: 2075

Noble Hospital, Inc.
115 West Silver Street
Westfield, MA 01086-1634
DPH ID #: 2076

North Adams Regional Hospital
Hospital Avenue
North Adams, MA 01247
DPH ID #: 2061

Norwood Hospital
800 Washington Street
Norwood, MA 02062
DPH ID #: 2114

Providence Hospital
1233 Main Street
Holyoke, MA 01040
DPH ID #: 2150

Quincy Hospital
114 Whitwell Street
Quincy, MA 02169
DPH ID #: 2151

Saints Memorial Medical Center
Hospital Drive
Lowell, MA 01852
DPH ID #: 2063

Salem Hospital
81 Highland Avenue
Salem, MA 01970
DPH ID #: 2014

Attachment III – Hospital Profile: Hospital, Address, DPH Number

Somerville Hospital
230 Highland Avenue
Somerville, MA 02143
DPH ID #: 2001

South Shore Hospital, Inc.
55 Fogg Road
South Weymouth, MA 02190
DPH ID #: 2107

Southwood Community Hospital
111 Dedham Street
Norfolk, MA 02056
DPH ID #: 2856

St. Anne's Hospital
795 Middle Street
Fall River, MA 02721
DPH ID #: 2011

St. Elizabeth's Hospital
736 Cambridge Street
Boston, MA 02135
DPH ID #: 2085

St. Luke's Hospital of New Bedford
101 Page Street
New Bedford, MA
DPH ID #: 2010

St. Vincent Hospital, Inc.
25 Winthrop Street
Worcester, MA 01604
DPH ID #: 2128

Sturdy Memorial Hospital
211 Park Avenue
Attleboro, MA 02703-0649
DPH ID #: 2100

Tobey Hospital
43 High Street
Wareham, MA 02571
DPH ID #: 2106

Attachment III – Hospital Profile: Hospital, Address, DPH Number

Transitional Hospital Corporation
(formerly JB Thomas Hospital)
15 King Street
Peabody, MA 01960
DPH ID #: 2171

University Hospital
88 East Newton Street
Boston, MA 02118
DPH ID #: 2084

University of Massachusetts Medical Center
55 Lake Avenue
North Worcester, MA 01655
DPH ID #: 2841

Vencor Hospital - (formerly Hahnemann Hospital)
1515 Commonwealth Avenue
Brighton, MA 02135
DPH ID #: 2091

Whidden Memorial Hospital
103 Garland Street
Everett, MA 02149-5095
DPH ID #: 2046

Winchester Hospital
41 Highland Avenue
Winchester, MA 01890
DPH ID #: 2094

Wing Memorial Hospital and Medical Center
40 Wright Street
Palmer, MA 01069-1187
DPH ID #: 2181

Attachment IV – Summary: Mergers, Name Changes, Closures & Conversions

MERGERS		
Original Entities	**New Corporation**	**Effective Date**
Boston Hospital for Women Peter Bent Brigham Robert Breck Brigham	Brigham & Women's Hospital	Early 1980's
Holden District Hospital Worcester Hahnemann Hospital Worcester Memorial Hospital	Medical Center of Central Massachusetts	1990
Leonard Morse Hospital – Natick Framingham Union Hospital	MetroWest Medical Center	January 1992
St. John's Hospital St. Joseph's Hospital	Saints Memorial Medical Center	October 1, 1993
Burbank Hospital – Fitchburg Leominster Hospital	Central New England Health System, Inc,	1993
Cardinal Cushing – Brockton Goddard Memorial – Stoughton	Good Samaritan Medical Center	October, 1993
Norwood Community Hospital Southwood Hospital	Neponset Valley Health System	1992
Salem Hospital North Shore Children's Hospital	North Shore Medical Center	1990

Attachment IV – Summary: Mergers, Name Changes, Closures & Conversions

NAME CHANGES		
Original Name	**New Name**	**Comments**
Bon Secours Hospital	Holy Family Hospital & Medical Center	
Central Hospital	Heritage Hospital	No longer acute care
Doctor's Hospital	AdCare	No longer acute care
Glover Memorial Hospital	Deaconess-Glover	
Hahnemann Hospital	Vencor, Inc.	Long term acute hospital
JB Thomas Hospital	Transitional Hospitals Corp.	Long term acute hospital
Lahey Clinic Hospital, Inc.	Lahey Hitchcock Clinic	
Lynn Hospital	Atlanticare Hospital	
Nashoba Community Hospital	Deaconess-Nashoba Hospital	
New England Memorial Hospital	Boston Regional Medical Center	
Quincy City Hospital	Quincy Hospital	
Waltham/Weston Hospital	Deaconess-Waltham Hospital	

Attachment IV – Summary: Mergers, Name Changes, Closures & Conversions

CLOSURES AND CONVERSIONS	
Amesbury Hospital	
Brookline Hospital	
Fairlawn Hospital	Converted to Non-Acute Hospital
Farren Memorial Hospital	
HCHP Hospital	
Heritage Hospital	Converted to Non-Acute Hospital
Hunt Memorial Hospital	
Ludlow Hospital	Closed – December 1994
Mary Alley Hospital	
Massachusetts Osteopathic Hospital	
Parkwood Hospital	
Sancta Maria Hospital	Converted to Nursing Home
St. Luke's Hospital in Middleborough	
St. Margaret's Hospital for Women	
Winthrop Hospital	
Worcester City Hospital	

Note: Hospital closed unless otherwise indicated. Subsequent to closure some hospitals may have re-opened for uses other than an acute hospital, e.g., health care center, rehabilitation hospital.

PART 6 - TECHNICAL DOCUMENTATION

FISCAL YEAR 1995 MERGED CASE MIX AND CHARGE DATA
VERSION 95.V01

FEBRUARY 23, 1996

TECHNICAL DOCUMENTATION

Technical Documentation has five sections:

1. A page of physical specifications for the file(s) requested (following INDEX page);
2. Documentation on calculated fields;
3. A summary of the contents of the two data files;
4. Revenue Code Mappings
5. Alphabetical Payor Type List.

Physical specifications include items such as tape density and block size, and a description of the file structure.

Record layout gives a description of each field along with the starting and ending positions.

Calculated fields are age, newborn age in weeks, preoperative days, length of stay, UHIN Sequence Number and days between stays. Each description has three parts:

> First is a description of any conventions. For example, how are missing values used?
>
> Second is a brief description of how the fields are calculated. This description leaves out some of the detail. However, with the first section it gives a good working knowledge of the field.
>
> Third is a detailed description of how the calculation is performed. This description follows the code very closely.

AGE CALCULATION

A) Conventions:

1) Age is calculated if the date of birth and admission date are valid. If either one is invalid, then '999' is placed in this field.

All dates of birth that are greater than the admission date are assumed to be in the previous century, with the exception of newborns. Because some newborns are assigned a day of admission previous to their date of birth it is practical to check the MDC before calculating age.

Any hundred years older flag that would result in a patient being more than 124 is ignored.

Discretion should be used whenever a questionable age assignment is noted. Researchers are advised to consider other data elements (i.e., if the admission type is newborn) in their analysis of this field.

B) Brief Description:

Age is calculated by subtracting the date of birth from the admission date. A 100-years-old flag is used for patients that are over 100 years old. If a patient has been assigned to a newborn DRG than they are assigned an age of zero.

C) Detailed Description:

1) If the patient has already had a birthday for the year, their age is calculated by subtracting the year of birth from the year of admission. If not, then the patient's age is the year of admission minus the year of birth, minus one.
2) If the result is negative (date of birth is assumed to be in the previous century) then 100 is added to the age.
3) If the age is 99 (the admission date is a year before the admission date or less) and the MDC is 15 (the patient is a newborn), then the age is assumed to be zero.
4) If the century code is equal to 1 and the age calculated so far is less than 25 then 100 is added to the age.

NEWBORN AGE

A) Conventions:

1) Newborn age is calculated to the nearest week (the remainder is dropped). Thus, newborns zero to six days old are considered to be zero weeks old.
2) Discharges that are not newborns have '99' in this field.

B) Brief Description

Discharges less than one year old have their age calculated by subtracting the date of birth from the admission date. This gives the patient's age in days. This number is divided by seven, the remainder is dropped.

C) Detailed Description

1) If a patient is 1 year old or older, the age in weeks is set to '99'.
2) If a patient is less than 1 year old then:

a. Patients age is calculated in days using the Length of Stay (LOS) routine, described herein.
b. Number of days in step 'a' above is divided by seven, and the remainder is dropped.

PREOPERATIVE DAYS

A) Conventions:

1. A procedure performed on the day of admission will have preoperative days set to zero. One performed on the day after admission will have preoperative days set to 1, etc.
2. Preoperative days are set to 0000 when preoperative days are not applicable.

B) Brief Description

Preoperative days are calculated by subtracting the patient's admission date from the surgery date.

C) Detailed Description

1. If there is no procedure date, or if the procedure date or admission date is invalid, then preoperative days are set to 0000.
2. Otherwise preoperative days are calculated using the Length of Stay (LOS) Routine, as described herein.

LENGTH OF STAY (LOS) ROUTINE

A) Conventions

1. None

B) Brief Description

1. Length of Stay (LOS) is calculated by subtracting the first date from the second date.
2. Days are accumulated a year at a time, until both dates are in the same year. At this point the algorithm may have counted beyond the ending date or may still fall short of it. The difference is added (or subtracted) to give the correct LOS.

C) Detail Description

1. Convert the first date to a julian date, but in the same year as the second date. Again, the algorithm will count the number of days, a year at a time, between the two dates. This total is adjusted to the final value by adding the difference between the two dates, but the difference is calculated in the year of the second date. This becomes important when February 29 lies between the two dates.

2. The second date is converted to a julian date.
-- For example:
If the two dates are 03/10/83 and 03/01/84, then 03/10/83 becomes 84070 and 03/01/84 becomes 84061.
3. Initialize LOS to zero
Counting from the first date to the second date in years, add the correct number of days for each year until the year of the second date has been reached.

---- LOS = 0 then,
LOS = 0 + 366 (number of days between 03/10/83 and 03/01/84).

4. Using the last three digits of the julian date, subtract the first date from the second date and add the result to the LOS.

---- 061 – 170 = -9 (the negative number indicates that the anniversary of the first date is after the second date).

LOS = 366 + -9 = 375

LENGTH OF STAY (LOS) CALCULATION

A) Conventions

1. Same day discharges have a length of stay of 1 day.

B) Brief Description

1. Length of Stay (LOS) is calculated by subtracting the admission date from the Discharge Date (and then subtracting LOA days). If the result is zero (for same day discharges), then the value is changed to one.

C) Detail Description

1. The length of stay is calculated using the LOS routine.
2. If the value is zero then it is changed to a 1.

UHIN SEQUENCE NUMBER

A) Conventions

1. If the Unique Health Information Number (UHIN) is undefined (not reported, unknown or invalid), the sequence number is set to zero.

B) Brief Description

1. The Sequence Number is calculated using both the accepted and cautionary use files sorted together by UHIN, admission and discharge date. The sequence number is then calculated by incrementing a counter for each UHIN's set of admissions.

C) Detailed Description

1. UHIN Sequence Number is calculated by sorting the entire database (both accepted and cautionary use files) by UHIN, admission date, then discharge date (both dates are sorted in ascending order).
2. If the UHIN is undefined (not reported, unknown or invalid), the sequence number is set to zero.
3. If the UHIN is valid, the sequence number is calculated by incrementing a counter from 1 to nnnn, where a sequence number of 1 indicates the first admission for the UHIN, and nnnn indicates the last admission for the UHIN.
4. If a UHIN has 2 admissions on the SAME day, the discharge date is used as the secondary sort key.
5. Because the sequence number is calculated using the entire database rather than calculating the sequence number on the accepted file and then SEPARATELY calculating the sequence number on the cautionary use file, it may be necessary to read BOTH the accepted and cautionary use files in order to get all of a patient's re-admissions. (i.e., a patient is admitted to Somerville Hospital then transferred to Beth Israel. The sequence number is 1 for the first admission at Somerville Hospital and numbered 2 for the second admission at Beth Israel. However, Beth Israel is on the accepted file while Somerville Hospital is on the cautionary file.)

DAYS BETWEEN STAYS

A) Conventions

1. If the UHIN is undefined (not reported unknown or invalid), the days between stays is set to zero.
2. If the previous discharge date is greater than the current admission date or the previous discharge date or current admission date is invalid (i.e., 03/63/95), DAYS BETWEEN STAYS is set to '9999' to indicate an error.

B) Brief Description

The Days Between Stays is calculated using both accepted and cautionary use files sorted together by UHIN, admission date, then discharge date. For UHINs with two or more admissions, the calculation subtracts the previous discharge date from the current admission date to find the Days Between Stays.

C) Detailed Description

1. The Days Between Stays data element is calculated by sorting the entire database (both accepted and cautionary use files) by UHIN, admission date, then discharge date (both dates are sorted in ascending order).
2. If the UHIN is undefined (not reported, unknown or invalid), the Days Between Stays is set to zero.
3. If the UHIN is valid and this is the first occurrence of the UHIN, the discharge date is saved (in the event there is another occurrence of the UHIN). In this case, the Days Between Stays is set to zero.
4. If a second occurrence of the UHIN is found, days between stays is calculated by finding the number of days between the previous discharge and the current admission date with the following caveats:
    a. if the previous discharge date is greater than the current admission date or the previous discharge date or current admission date is invalid (i.e., 03/63/95), DAYS BETWEEN STAYS is set to '9999' to indicate an error.
5. Step 4 is repeated, for all subsequent re-admissions, until the UHIN changes.
6. The routine, used to calculate Length of Stay, is also used to calculate days between stays.
7. If the discharge date on the first admission is the same as the admission date on the first RE-ADMISSION, days between stays is set to zero. This situation occurs for transfer patients as well as women admitted into the hospital with false labor.

FILE STRUCTURE
1995 DATABASE

This database is divided into 2 standard labeled IBM files for the following reason. Some of the hospitals have not been able to submit four quarters of acceptable data in time for the release. In an attempt to make it difficult to mistakenly treat hospitals with incomplete data like the other hospitals, we have separated these hospitals into two files. The first file contains hospitals whose data was accepted by the Commission. The second file contains hospitals whose data did not meet regulatory standards.

The first file contains municipal hospitals with a fiscal year beginning on July 1, and non-municipal hospitals which have a fiscal year beginning on October 1. All hospitals on this file contain one years worth of data.

The second file contains data for the four hospitals with unacceptable data. These are:

Athol Memorial Hospital: Data submitted for quarter one passed the edit program. Quarters two, three and four did not pass the edit program due to revenue code errors.

Haverhill Municipal (Hale) Hospital: Submitted data for quarters one, two, and three passed the edit program. No submission for quarter four.

Milford-Whitinsville Regional Hospital: Submitted data for quarters one, two, and three passed the edit program. No submission for quarter four.

Milton Hospital: Data submitted for quarters one, two and three passed the edit program. Quarter four did not pass the edit program due to overall programming problems.

REVENUE CODE MAPPINGS
ANCILLARY SERVICES

Effective January 1, 1994, amendments to Regulation 114.1 CMR 17.00 were adopted which require use of the UB-92 revenue codes. As a result, all ancillary service revenue code subcategories are now mapped to the UB-92 major classification heading for that revenue center. For example, codes 251-259 map to code 250.

For periods ending December 31, 1993 and earlier, the following tables identify how the UB-92 revenue codes are mapped in the case mix database.

250 PHARMACY:
250 Pharmacy
251 General
252 Generic Drugs
253 Non-Generic Drugs
254 Blood Plasma
255 Blood-Other Components
256 Experimental Drugs
257 Non-Prescription
258 IV Solution
259 Other

260 IV THERAPY

270 MEDICAL / SURGICAL SUPPLIES:
270 General Medical Surgical Supplies
272 Sterile Supply
273 Take Home Supply
274 Prosthetic Devices
275 Pace Maker
277 Oxygen-Take Home
278 Other Implants
279 Other Devices
290 Durable Medical Equipment
291 Rental DME
292 Purchase DME
299 Other Equipment

300 LABORATORY:
300 General Laboratory
301 Chemistry
302 Immunology
303 Renal Patient (Home)
304 Non-Routine Dialysis
305 Hematology
306 Bacteriology & Microbiology
307 Urology
309 Other Lab
310 Lab-Pathological
311 Cytology
312 Histology
314 Biopsy
319 Other Path. Lab
971 Lab. Professional Fees

320 DIAGNOSITC RADIOLOGY:
320 General
321 Angiocardiograph
324 Chest X-Ray
329 Other
400/409 Other Imaging Services
401 Mammography
402 Ultrasound
972 Diagnostic Radiology Professional Fees

THERAPEUTIC RADIOLOGY:
330 General
331 Chemotherapy-Inject
332 Chemotherapy-Oral
333 Radiation Therapy
335 Chemotherapy-IV
339 Other
973 Therapeutic Radiology Professional Fees

NUCLEAR MEDICINE:
340 General
341 Diagnostic
342 Therapeutic
349 Other Nuclear Medicine
974 Nuc Med Professional Fees

CAT SCAN:
350 General
351 Head Scan
352 Body Scan
359 Other

OPERATING ROOM:
360 General
361 Minor Surgery
362 Organ Transplant (except Kidney)
367 Kidney Transplant
369 Other
975 Operating Room Professional Fees

ANESTHESIOLOGY:
370 General
374 Acupuncture
379 Other
963 Anesthesiology Professional Fees (MD)
964 Anesthesiology Professional Fees (RN)

BLOOD:
380 General
381 Packed Red Cells
382 Whole Blood
389 Other

BLOOD STORAGE, PROCESSING ANDADMINISTATION:
390 General
*** 391 Blood/Administration
399 Other

RESPIRATORY THERAPY:
410 General
412 Inhalation Services
413 Hyperbaric Oxygen Therapy
419 Other
976 Respiratory Therapy Professional Fees

PHYSICAL THERAPY:
420 General
429 Other
977 Physical Therapy Professional Fees

OCCUPATIONAL THERAPY:
430 General
439 Other
978 Occupational Therapy Professional Fees

SPEECH THERAPY:
440 General
449 Other
979 Speech Therapy Professional Fees

EMERGENCY ROOM:
450 General
459 Other
981 Emergency Room Professional Fees

PULMONARY FUNCTION:
460 General
469 Other

AUDIOLOGY:
470 General
471 Diagnostic
472 Treatment
479 Other

CARDIAC CATHETERIZATION:
480 General
481 Cardiac Catheterization Lab
482 Stress Test
489 Other

AMBULANCE:
540 General
541 Supplies
542 Medical Treatment
543 Heart Mobile
544 Oxygen
545 Air Ambulance
549 Other

RECOVERY ROOM:
710 General
719 Other

LABOR AND DELIVERY:
720 General
721 Labor
722 Delivery
723 Circumcision
724 Birthing Center
729 Other

EKG/ECG:
730 General
731 Holter Monitor
739 Other
985 EKG Professional Fees

EEG:
740 General
749 Other
922 Electromyogram
986 EEG Professional Fees

RENAL DIALYSIS:
800 General
801 Inpatient Hemodialysis
802 Inpatient Peritoneal (non CAPD)
805 Training Hemodialysis
806 Training Peritoneal Dialysis
807 Under Arrangement in house
808 Continuous Ambulatory Peritoneal Dialysis Training
809 In Unit Lab-Routine
810 Self Care Dialysis Unit
811 Hemodialysis – self care
812 Peritoneal Dialysis – self care
813 Under Arrangement in house – self care
814 In Unit Lab – self care
880 Miscellaneous Dialysis
881 Ultrafiltration

KIDNEY ACQUISITION:
860 General
861 Monozygotic Sibling
862 Dizygotic Sibling
863 Genetic Parent
864 Child
865 Non-relating living
866 Cadaver

PSYCHOLOGY AND PSYCHIATRY:
900 General
901 Electroshock Treatment
902 Milieu Therapy
903 Play Therapy
909 Other
910 Psychology / Psychiatry Services
911 Rehabilitation
912 Day Care
913 Night Care
914 Individual Therapy
915 Group Therapy
916 Family Therapy
917 Bio Feedback
918 Testing
919 Other
961 Psychiatric Professional Fees

OTHER:
280 Oncology
*** 490 Ambulatory Surgery
*** 499 Other Ambulatory Surgery
*** 510 Clinic
*** 511 Chronic Pain Center
*** 512 Dental Clinic
*** 519 Other Clinic
530 General Osteopathic Services
531 Osteopathic Therapy
539 Other Osteopathic Therapy
560 Medical Social Services
700 Cast Room - General
709 Cast Room - Other
750/759 Gastro-Intestinal Services
890/899 Other Donor Bank
891 Bone Donor
892 Organ Donor
893 Skin Donor
920/929 Other Diagnostic Services
921 Peripheral Vascular Lab
940/949 Other Therapeutic Services
941 Recreational Therapy
942 Educational Therapy
943 Cardiac Rehabilitation
960 General Professional Fees
962 Opthamology
969 Other Professional Therapy
984 Medical Social Services
987 Hospital Visit
988 Consultation
989 Private Duty Nurse

*** Please note:
These revenue centers should be reported only for those patients admitted to the hospital subsequent to surgical day care.

The following ancillary revenue codes (and their related subcategories) are not valid pursuant to Regulation 114.1 CMR 17.00 and are not used for reporting charges on the case mix data tapes. These revenue codes relate either to outpatient services or to non-patient care.

500 Outpatient Services
520 Free Standing Clinic
530 Osteopathic Services
550 Skilled Nursing
570 Home Health Aid
580 Other Visits (Home Health)
590 Units of Service (Home Health)
600 Oxygen (Home Health)
640 Home IV Therapy Services
660 Respite Care (HHA only)
820 Hemodialysis – Outpatient or home
830 Peritoneal Dialysis – Outpatient or home
840 Continuous Ambulatory Peritoneal Dialysis – Outpatient or home
850 Continuous Cycling Peritoneal Dialysis – Outpatient or home
860 Reserved for Dialysis (National Assignment)
870 Reserved for Dialysis (National Assignment)
990 Patient Convenience Items

ALPHABETICAL PAYOR TYPE LIST

Source of Payment Alphabetically Listed Within Payor Type
Revised June 27, 1994

PAYOR TYPE		SOURCE OF PAYMENT	
Code	**Abbreviation**	**Code**	**Definition**
6	BCBS	142	Blue Cross Indemnity
6	BCBS	154	Other BCBS (Not listed elsewhere)
6	BCBS	156	Out-Of-State BCBS
C	BCBS	2	Bay State Health Care
C	BCBS	11	Blue Care Elect
C	BCBS	21	Commonwealth PPO
C	BCBS	81	HMO Blue
C	BCBS	3	Network Blue (Point of Service)
C	BCBS-MC	155	Other Blue Cross Managed Care (not listed elsewhere)
6	BCBS*	136	BCBS Medex
7	COM	51	Aetna Life Insurance
7	COM	52	Boston Mutual Insurance
7	COM	53	Connecticut General Insurance
7	COM	54	Continental Assurance Insurance
7	COM	89	Great West/NE Care
7	COM	55	Guardian Life Insurance
7	COM	56	Hartford L&A Insurance
7	COM	57	John Hancock Life Insurance
7	COM	58	Liberty Life Insurance
7	COM	85	Liberty Mutual
7	COM	59	Lincoln National Insurance
7	COM	60	Mass Mutual Life Insurance
7	COM	61	Metropolitan Life Insurance
7	COM	62	Mutual of Omaha Insurance
7	COM	91	New England Benefits
7	COM	63	New England Mutual Insurance
7	COM	64	New York Life Insurance
7	COM	65	Paul Revere Life Insurance
7	COM	92	Private Health Care System
7	COM	66	Prudential Insurance
7	COM	101	Quarto Claims
7	COM	67	State Mutual Life Insurance
7	COM	94	Time Insurance Co
7	COM	100	Transport Life Insurance
7	COM	68	Traveler's Insurance
7	COM	70	Union Labor Life Insurance
7	COM	102	Wausau Insurance Company

PAYOR TYPE		SOURCE OF PAYMENT	
Code	Abbreviation	Code	Definition
D	COM-MC	29	CIGNA Health Plan
D	COM-MC	87	CIGNA PPO
D	COM-MC	82	John Hancock Preferred
D	COM-MC	76	Mass Mutual
D	COM-MC	15	Met-Elect
D	COM-MC	16	Met-Life Point of Service
D	COM-MC	41	MetLife Healthcare Network of Mass
D	COM-MC	78	Phoenix Preferred PPO
D	COM-MC	18	Pru Network PPO
D	COM-MC	26	PruCare
D	COM-MC	17	PruCare Plus (Point of Service)
D	COM-MC	75	PRUCARE of Mass
D	COM-MC	32	Travelers Preferred
7	COM*	137	AARP/Prudential
7	COM*	138	Banker's Life and Casualty Insurance
7	COM*	139	Bankers Multiple Line
7	COM*	140	Combined Insurance Company of America
7	COM*	141	Other Medigap (not listed elsewhere)
7	COM**	147	Other Commercial (not listed elsewhere)
9	FC	143	Free Care
5	GOV	151	CHAMPUS
5	GOV	144	Other Government
5	GOV	120	Out-of-State Medicaid
8	HMO	44	(Capital Area) Community Health Plan
8	HMO	6	Central Mass. Health Care
8	HMO	4	Fallon Community Health Plan
8	HMO	1	Harvard Community Health Plan
8	HMO	20	HCHP of New England (formerly RIGHA)
8	HMO	24	Health New England, Inc.
8	HMO	45	Health Source New Hampshire
8	HMO	46	HMO Rhode Island
8	HMO	40	Kaiser Foundation
8	HMO	19	Matthew Thornton
8	HMO	43	MEDTAC
8	HMO	47	Neighborhood Health Plan
8	HMO	5	Ocean State Physician Plan
8	HMO*	148	Other HMO (not listed elsewhere)
8	HMO	8	Pilgrim Health Care
8	HMO	25	Pioneer Plan
8	HMO	7	Tufts Associated Health Plan
8	HMO	9	United Health Care of New England (Ocean State)
8	HMO	48	US Healthcare
4	MCD	103	Medicaid

PAYOR TYPE		SOURCE OF PAYMENT	
Code	Abbreviation	Code	Definition
B	MCD-MC	105	Medicaid Managed Care-Bay State
B	MCD-MC	107	Medicaid Managed Care-Capital Area Community Health Plan
B	MCD-MC	106	Medicaid Managed Care-Central Mass Health Care
B	MCD-MC	108	Medicaid Managed Care-Fallon Community Health Plan
B	MCD-MC	109	Medicaid Managed Care-Harvard Community Health Plan
B	MCD-MC	110	Medicaid Managed Care-Health New England
B	MCD-MC	111	Medicaid Managed Care-HMO Blue
B	MCD-MC	112	Medicaid Managed Care-Kaiser Foundation Plan
B	MCD-MC	113	Medicaid Managed Care-Neighborhood Health Plan
B	MCD-MC	114	Medicaid Managed Care-Ocean State Physician's Plan
B	MCD-MC	119	Medicaid Managed Care-Other (not listed elsewhere)
B	MCD-MC	115	Medicaid Managed Care-Pilgrim Health Care
B	MCD-MC	104	Medicaid Managed Care-Primary Care Clinician (PCC)
B	MCD-MC	116	Medicaid Managed Care-Tufts Associated Health Plan
B	MCD-MC	117	Medicaid Managed Care-US Healthcare
B	MCD-MC	118	Medicaid-Mental Health Management of America (MHMA)
3	MCR	121	Medicare
3	MCR	135	Out-of-State Medicare
F	MCR-MC	122	Medicare HMO-Bay State Health for Seniors
F	MCR-MC	124	Medicare HMO-Central Mass Health Care Central Care
F	MCR-MC	123	Medicare HMO-Community Health Plan Medicare Plus
F	MCR-MC	131	Medicare HMO-Enhance (Pilgrim product)
F	MCR-MC	125	Medicare HMO-Fallon Senior Plan
F	MCR-MC	126	Medicare HMO-Harvard Community Senior Care
F	MCR-MC	127	Medicare HMO-Health New England Medicare Wrap
F	MCR-MC	128	Medicare HMO-HMO Blue for Seniors
F	MCR-MC	129	Medicare HMO-Kaiser Medicare Plus Plan
F	MCR-MC	132	Medicare HMO-Matthew Thornton Senior Plan
F	MCR-MC	130	Medicare HMO-Ocean State Physician Health Plan
F	MCR-MC	134	Medicare HMO-Other (not listed elsewhere)
F	MCR-MC	133	Medicare HMO-Tufts Medicare Supplement (TMS)
N	NONE	159	None (Valid for Secondary Source of Payment
O	OTH	153	Grant
O	OTH	152	Foundation
O	OTH**	150	Other Non-Managed Care (not listed elsewhere)

PAYOR TYPE		SOURCE OF PAYMENT	
Code	Abbreviation	Code	Definition
E	PPO	71	ADMAR
E	PPO	10	Advantage (Pilgrim product)
E	PPO	12	Central Mass Health-Care Central Plus
E	PPO	13	Community Health Plan Options
E	PPO	88	Freedom Care
E	PPO	14	Health New England Advantage
E	PPO	90	Healthsource Preferred (self-funded)
E	PPO	77	Options for Healthcare PPO
E	PPO	79	Pioneer Health Care PPO
E	PPO**	149	PPO and Other Managed Care (not listed elsewhere)
E	PPO	93	Psychological Health Plan
E	PPO	80	Tufts Total Health Plan
	RES	22	Reserved Field
	RES	23	Reserved Field
	RES	27	Reserved Field
	RES	28	Reserved Field
	RES	30	Reserved Field
	RES	31	Reserved Field
	RES	33	Reserved Field
	RES	34	Reserved Field
	RES	35	Reserved Field
	RES	36	Reserved Field
	RES	37	Reserved Field
	RES	38	Reserved Field
	RES	39	Reserved Field
	RES	42	Reserved Field
	RES	49	Reserved Field
	RES	50	Reserved Field
	RES	69	Reserved Field
	RES	72	Reserved Field
	RES	73	Reserved Field
	RES	74	Reserved Field
	RES	83	Reserved Field
	RES	84	Reserved Field
	RES	86	Reserved Field
	RES	95	Reserved Field
	RES	96	Reserved Field
	RES	97	Reserved Field
	RES	98	Reserved Field
	RES	99	Reserved Field
1	SP	145	Self-Pay
2	WOR	146	Worker's Compensation

NOTES: * Medigap is always supplemental to Medicare.
**Please list under specific carrier when possible.